



FSUB 10478.2
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Robert A. Holton

Art Unit 1625

Serial No. 10/673,300

Filed September 29, 2003

Confirmation No. To Be Assigned

For PREPARATION OF SUBSTITUTED ISOSERINE ESTERS USING β -LACTAMS
AND METAL OR AMMONIUM ALKOXIDES

December 22, 2003

TO THE COMMISSIONER FOR PATENTS,

P.O. BOX 1450

ALEXANDRIA, VA 22213-1450

SIR:

INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, applicant submits a copy of reference 8 listed on the attached PTO/SB/08A for consideration by the Patent and Trademark Office in the above-entitled application and to be made of record therein. Copies of references 1-7 and 9-21 have not been provided in accordance with MPEP 609 and 37 C.F.R. § 1.98(d) because they are of record in prior application Serial No. 10/194,343, filed July 12, 2002, now U.S. Patent 6,653,490 B2 relied upon for an earlier filing date under 35 U.S.C. § 120.

Respectfully submitted,

Edward J. Hejlek, Reg. No. 31,525
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EJH/dfw

Attachment

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 3 Attorney Docket No. FSUB 10478.2

Complete if Known

Application Number	10/673,300
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First Named Inventor	Robert A. Holton
Group Art Unit	1625
Examiner Name	B. Trinh

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	1	5,175,315		Holton	12-29-1992
	2	5,430,160		Holton	07-04-1995
	3	5,466,834		Holton	11-14-1995
	4	5,717,115		Holton	02-10-1998
	5	6,069,260		Holton	05-30-2000
	6	6,124,481		Holton	09-26-2000
	7	6,458,977	B1	Holton	10-01-2002
	8	6,653,490	B2	Holton	11-25-2003

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office	Number ⁴	Kind Code ² (if known)			
	9	EP	0400971	A2	Florida State University	12-05-1990	
	10	WO	93/06079	A1	Florida State University	04-01-1993	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

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PTO/SB/08A


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Sheet	2	of	3
		Attorney Docket No.	FSUB 10478.2

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	11	AOYAMA et al. "Photochemical Reactions of N-Benzoylformyl-N-(Phenylthiocarbonyl)-Amines. A Novel Photocyclization Involving 1,4-Phenylthio Migration" Tetrahedron Letters (1983), pp. 1169-1170, Vol. 24, No. 11, XP002224840, Elsevier Science Publishers, Amsterdam, NL	
	12	FRAPPIER et al. "Alcaloïdes Peptidiques-X ^a . Approche de la Synthese des Alcaloïdes Peptidiques 1. Réactivité de N-Tosyláziridines Vis-à-Vis de Réactifs Nucléophiles" Tetrahedron (1978), pp 2911-2916, Vol. 34, No. 19, XP002224841, Elsevier Science Publishers, Amsterdam, NL	
	13	JUST et al. "Beta-Lactams. XI. Synthesis of N-Phosphorylated Mono- and Bicyclic Beta-Lactams" ¹ Canadian Journal of Chemistry (1983), pp. 1730-1735, Vol. 61, No. 8, XP002224842, National Research Council, Ottawa, CA	
	14	OJIMA et al. "A Highly Efficient Route to Tacotere by the Beta-Lactam Synthon Method" Tetrahedron Letters (1993-06-25), pp 4149-4152, Vol. 34, No. 26, XP000561213, Elsevier Science Publishers, Amsterdam, NL	
	15	Ojima et al. "Efficient and Practical Asymmetric Synthesis of the Taxol C-13 Side Chain, N-Benzoyl-(2R,3S)-3-phenylisoserine, and Its Analogues via Chiral 3-Hydroxy-4-aryl-β-lactams through Chiral Ester Enolate-Imine Cyclocondensation" Journal of Organic Chemistry, Vol. 56, No. 5 (1991) pp. 1681-1683.	
	16	Ojima et al. "N-Acyl-3-Hydroxy-β-Lactams as Key Intermediates for Taxotere and its Analogs" Bioorganic and Medicinal Chemistry Letters, Vol. 3, No. 11 (1993) pp. 2479-2482.	
	17	Ojima et al. "New and Efficient Approaches to the Semisynthesis of Taxol and its C-13 Side Chain Analogs by Means fo β-Lactam Synthon Method" Tetrahedron Letters, Vol. 48, No. 34 (1992) pp. 6985-7012.	
	18	Ojima et al. "Synthesis and Biological Activity of 3'-alkyl- and 3'-alkenyl-3'-dephenyldocetaxels" Bioorganic and Medicinal Chemistry Letters, Vol. 4, No. 21 (1994) pp. 2631-2634.	

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Sheet	3	of	3	Attorney Docket No.	FSUB 10478.2

19	OJIMA et al. "Synthesis and Structure-Activity Relationships of Novel Nor-Seco Analogs of Taxol and Taxotere" Journal of Organic Chemistry (1994-02-11), pp 515-517, Vol. 59, No. 3, XP001094357, American Chemical Society, Washington, DC	
20	Ojima et al. "Synthesis of Novel 3'-Trifluoromethyl Taxoids Through Effective Kinetic Resolution of Racemic 4-CF ₃ -β-Lactams with Baccatins, Chirality, Vol. 9 (1997) pp. 487-494.	
21	PALOMO et al. "Highly Stereoselective Synthesis of Alpha-Hydroxy Beta-Amino Acids Through Beta-Lactams: Application to the Synthesis of the Taxol and Bestatin Side Chains and Related Systems" Tetrahedron Letters (1990-10-22), pp 6429-6432, Vol. 31, No. 44, XP002224788, Elsevier Science Publishers, Amsterdam, NL	

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